operation, an indurated area appeared at the lower angle of the scar, not definitely fixed to the symphysis. An x-ray film showed the pelvic bones to be normal. Cystoscopy showed a well healed scar, at the anterior end of which was a smooth tumor 2 mm. in diameter, covered with normal mucous membrane. The patient left on vacation for one month, and on his return a 6 cm. mass was present immediately under the skin in the suprapubic area surrounded by extensive induration, which extended to the base of the penis without discoloration.

The patient was rehospitalized and a midline suprapubic incision was made over the symphysis for a distance of 6 cm. Part of the old scar was removed. Immediately vascular tumor tissue was encountered adherent to the subcutaneous tissue. This was pale in color, not unlike normal subcutaneous fat, but much harder. A portion of this and several nodules at the base of the penis were removed for biopsy. The wound was closed and the patient was discharged on the third day, to return for x-ray therapy.

Section examination revealed essentially the same type of cell as was seen in the previous bladder tumor. There appeared to be more of a tendency to infiltrative type of growth, there being a considerable amount of connective tissue with the cells, which were found in varying sized groups.

A week after the operation a course of deep x-ray therapy was started and daily treatments were given for the next 20 days, during which time the patient received 5,200 r through two anterior portals to the urinary bladder, using the following factors: 200 K.V., 15 M, 50 cm. distance, Thoreus filter, half value layer, 2.10 mm. copper. The growth disappeared rapidly except for several nodules at the base of the penis. Because of considerable localized skin reaction, therapy was stopped for ten days. Then in the next seven days the patient received 1,700 r to the left side of the base of the penis, using the following factors: 200 K.V., 15 Ma, 50 cm. distance, ½ mm. copper plus ½ mm. aluminum, half value layer 1.12 mm. copper. The remaining evidence of tumor gradually disappeared over the next two months until none was present. Cystoscopy at this time showed no abnormality except for the previously noted cystitis cystica without symptoms. Repeated examinations in the succeeding ten months showed no evidence of recurrence. The patient gained back all the weight lost during the hospitalization and x-ray therapy. How long this desirable state of arrest, or possible cure, will last is questionable.

DISCUSSION

Though the upper respiratory tract is the site of predilection for the extramedullary plasma cell tumor, its occurrence in any organ is possible. The plasma cell is accepted generally as a normal constituent of connective tissue originating in tissue lymphocytes, and the presence everywhere in the body of this type of cell makes for the same distribution of its neoplastic prototype. Clinically, however, such tumors appear as localized lesions on mucous membranes and probably have a long noncancerous phase before characteristic malignant spread occurs. Hellwig's studies indicate that histologically there are no differential characteristics in either phase. In the case here reported, the histology of the tissue from the bladder lesion and the later malignant spread were identical.. McNamara and Rogers' reported a case of a patient with tonsillar tumor in which the histology was identical with that of a cervical mass removed six years later. Characteristically these extramedullary tumors, whether single or multiple, do not show the urinary Bence-Jones protein and other findings typical of the medullary variety.

In the case reported here the author feels sure the lesion was present at the time of the first cystoscopy, but probably

it was very small. It could not have been missed if it had been even a quarter of the size seen later. Its very rapid growth postoperatively supports the contention that between the two cystoscopies the lesion went from a non-malignant to a malignant phase. The possibility of cure in extramedulary plasma cell tumors remains as long as the growth does not extend to bony structures or lymph nodes and if local recurrence remains sensitive to radiation.

The lesson in this singular case is that radiation, to which this neoplasm is extremely sensitive, should be used immediately after the diagnosis of plasma cell tumor is made. Biopsy before operation will permit preoperative or post-operative radiation and probably prevent local recurrence. In this, plasma cell tumors are unlike the common carcinomatous bladder tumors which are relatively insensitive to x-ray.

Addendum: It is now 18 months since the original operation and the patient is apparently cured.

SUMMARY

A case of extramedullary plasmacytoma of the bladder with local metastasis is reported. The literature is briefly touched upon and discussed.

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REFERENCES

- 1. Hellwig, C. A.: Extramedullary plasma cell tumors, Arch. Path., 36:95-111 (July), 1943.
- 2. Marion, G., and Leroux: Plasmacytoma in bladder, J. de Urologie, 18:121 (Aug.), 1924.
- 3. McNamara, W. L., and Rogers, R. J.: Extramedullary plasma cell tumor of tonsil with metastasis, Arch. Path., 36:89-90 (July), 1943.
- 4. Schridde, H.: Zentralbl. F. allg. Path. u. Path. Anat., 16:433, 1905.

Facial Characteristics of an Infant Without Renal Function

J. D. KIRSHBAUM, M.D., San Bernardino

IN 1946 Potter¹ called attention to the facial characteristics of infants with bilateral renal agenesis. This facial expression had not been observed in association with death from any other cause. Potter stated that "Infants with extreme renal hypoplasia or polycystic changes in the kidneys, and who die because of renal insufficiency, may have similar facies and may have some resemblance to infants with complete renal agenesis, but the appearance is never as typical, and the presence of a kidney anomaly cannot be foretold with certainty."

The typical facies as described by Potter have shown the following features: a receding of the chin, large, low-set ears (with little cartilage), an increase of the width between the eyes and an unusually prominent fold arising at the inner canthus of each eye. The fold sweeps downward and laterally to form a wide semicircle under the inferior medial aspect of each orbital space. There is a flattening and slight broadening of the nose. These features give the face of the infant a resemblance to that of a person of very advanced age.

In the case reported in following paragraphs there was agenesis of the right kidney and complete atrophy of the left kidney, with cyst formation. The facial features were so typical of the cases reported by Potter that a diagnosis of agenesis of the kidneys was made by the author before the autopsy was performed.

From the Department of Pathology, Kern General Hospital, Bakersfield.



Figure 1.—Photograph shows typical facies of infant, age one hour, in whom there was complete absence of the right kidney and hypoplasia of the left kidney.

CASE REPORT

History: The mother was a 28-year-old white female, gravida II para I. The previous pregnancy, six years before, had been normal and the child was living and well. A Kahn test of the mother's blood was negative. The mother had gained 15 pounds during pregnancy. After eight hours of labor she delivered spontaneously a male infant that expired after one hour.

Autopsy: The body weighed 2,100 gm. and was 42 cm. in length. There was pronounced edema of the scrotum, and the penis appeared hypoplastic. The facies presented an unusual mask-like appearance. The chin appeared receded and the distance between the eyes was greater than normal. There was a prominent fold arising at the inner canthus of each eye which appeared to sweep downward and outward, extend-

ing beneath each orbital space. This gave the child an older appearance. The bridge of the nose appeared flattened and wide.

The left hand was inverted (manus vara). The left foot showed a talipes calcaneus valgus, while the right foot showed a talipes equinovarus. The right thumb was missing and the left thumb was attached to the hand by a fibrous short pedicle. The anus was absent and the scrotum contained one testicle.

The left side of the diaphragm presented a defect through which had herniated the small intestines, the left lobe of the liver, the spleen, the pancreas, splenic flexure of the colon and the stomach into the pleural cavity.

The left lung was firm, smaller than normal and atelectatic. There was pronounced stenosis of the left main bronchus, which probably influenced the growth of the left lung.

Kidneys: There was a complete absence of the right kidney and right ureter. The left kidney was replaced by a dense fibrotic tissue studded with cysts up to 5 mm. in diameter. No normal parenchyma could be made out. There was a double ureter on the left side and it was transformed into a cord-like structure.

The urinary bladder was thickened and contracted. The left ureteral orifice in the bladder was obliterated and the right was missing.

The distal end of the rectum ended blindly.

There was a communication between the lower end of the rectum and the prostatic urethra. The urethra of the penis was patent.

The case reported is illustrative of the numerous malformations which may coexist and not cause death of the fetus in utero. Even with complete absence of the kidneys or total impairment of their function, the fetus may develop completely, although the lesion is incompatible with life following birth. In all of Potter's² cases of agenesis of the kidneys the facial characteristics were so typical that the autopsy findings often could be predicted. Although one kidney was found with complete absence of glomeruli, the case reported resembled those reported by Potter, who encountered absence of both kidneys.

San Bernardino County Hospital.

REFERENCES

- 1. Potter, Edith L.: Facial characteristics of infants with bilateral renal agenesis, Am. J. Obst. & Gynec., 51:885-888, (June), 1946.
- 2. Potter, Edith L.: Bilateral renal agenesis, J. Ped., 29:68-76 (July), 1946.

